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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,920	10/31/2001	Hideya Kawahara	SUNIP823/P5905	7758
22434	7590	06/15/2006		
BEYER WEAVER & THOMAS LLP P.O. BOX 70250 OAKLAND, CA 94612-0250			EXAMINER ZHEN, LI B	
			ART UNIT 2194	PAPER NUMBER

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/003,920

Applicant(s)

KAWAHARA, HIDEYA

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

DETAILED ACTION

1. Claims 1 – 39 are pending in the application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/28/2006 has been entered.

Response to Arguments

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. Claims 1-9, 12, 13, 15-24, 27, 28, 30-36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,863,889 to Chan et al. [hereinafter Chan] in view of U.S. Patent No. 6,438,744 to Toutonghi et al. [hereinafter Toutonghi].

7. As to claim 1, Chan teaches the invention substantially as claimed including a computer implemented method for an external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16] to control or monitor a target software component [facilitate access to and consumption of the reusable software component; col. 6, line 42 – col. 7, line 16] of an isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33], the method comprising:

by an external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16], creating a new isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33] for execution of the target software component [facilitate access to and consumption of the reusable software component; col. 6, line 42 – col. 7, line 16], wherein the external program is outside of the isolated execution unit [col. 6, line 40 - col. 7, line 16];

starting an intermediary software component within the isolated execution unit newly-created by the external program [constructs the enterprise bean proxy object using the key object saved in the CopyHelper; col. 10, lines 26 – 40]; and

establishing a communication path between the intermediary software component [bean proxy object; col. 10, lines 26 – 40] and the external program by the external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16], controlling or monitoring target software component [calls the necessary JavaBeans method 330 which in turn calls the corresponding business method on the enterprise bean 138 to access the database 100; col. 7, lines 15 – 33], executing in the isolated execution unit newly-created by the external program via the established communication path [access the software component on the first server through a computer network; col. 3, line 65 – col. 4, line 18].

Although Chan teaches the invention substantially, Chan does not specifically disclose indicating an identifier of the target software component to the intermediary software component and starting the target software component having the indicated identifier within the isolated execution unit newly-created by the external program.

However, Toutonghi teaches an external program [ActiveX client; col. 8, line 60 – col. 9, line 30], an isolated execution unit [COM object; col. 8, lines 60 – 67], indicating an identifier of the target software component to the intermediary software component [create component instances using a class identifier (CLSID); col. 8, line 63 - col. 9, line 30] and starting the target software component having the indicated identifier within the isolated execution unit newly-created by the external program [COM APIs that create instances using a class identifier (CLSID); col. 4, line 62 - col. 5, line 10].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Chan to incorporate the features of indicating an identifier of the target software component to the intermediary software component and starting the target software component having the indicated identifier within the isolated execution unit newly-created by the external program as taught by Toutonghi because this allows software developers to map between component models defined in different development environments that can provide for a more complete mapping of component objects and information within the object, while reducing the development and maintenance overhead of current mapping techniques [col. 3, lines 28 – 36 of Toutonghi].

8. As to claim 16, Chan as modified teaches a computer readable medium containing instructions for an external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan] to control or monitor a target software component [calls the necessary JavaBeans method 330 which in turn calls the corresponding business method on the enterprise bean 138 to access the database 100; col. 7, lines 15 – 33 of Chan] of an isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan], the computer readable medium comprising:

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computer code for creating a new isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan] by an external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan] for execution of the target software component [facilitate access to and consumption of the reusable software component; col. 6, line 42 – col. 7, line 16 of Chan], wherein the external program is outside of the isolated execution unit [col. 6, line 40 - col. 7, line 16 of Chan];

computer code for starting an intermediary software component within the execution unit newly-created by the external program [constructs the enterprise bean proxy object using the key object saved in the CopyHelper; col. 10, lines 26 – 40 of Chan] and for indicating an identifier of a target software component to the intermediary software component [create component instances using a class identifier (CLSID); col. 8, line 63 - col. 9, line 30 of Toutonghi];

computer code for starting the target software component having the indicated identifier within the isolated execution unit newly-created by the external program [COM APIs that create instances using a class identifier (CLSID); col. 4, line 62 - col. 5, line 10 of Toutonghi]; and

computer code for establishing a communication path between the intermediary software component [bean proxy object; col. 10, lines 26 – 40 of Chan] and the external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan],

computer code for the external program to control or monitor the target software component [calls the necessary JavaBeans method 330 which in turn calls the corresponding business method on the enterprise bean 138 to access the database 100; col. 7, lines 15 – 33 of Chan], executing in the isolated execution unit newly-created by the external program via the established communication path [access the software component on the first server through a computer network; col. 3, line 65 – col. 4, line 18 of Chan]. As to the motivation for combining Chan with Toutonghi, see the rejection to claim 1 above.

9. As to claim 31, Chan as modified teaches a computer implemented system operable to control or monitor a target software component [calls the necessary

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JavaBeans method 330 which in turn calls the corresponding business method on the enterprise bean 138 to access the database 100; col. 7, lines 15 – 33 of Chan] of an isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan], comprising:

- an isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan] created by an external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan];

- an intermediary software component within the isolated execution unit [constructs the enterprise bean proxy object using the key object saved in the CopyHelper; col. 10, lines 26 – 40 of Chan]; and

- the external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan], outside of the isolated execution unit but in the same computer system as the isolated execution unit created by the external program [col. 6, line 43 – col. 7, line 16 of Chan], the external program being configured to indicate an identifier of a target software component to the intermediary software component [create component instances using a class identifier (CLSID); col. 8, line 63 - col. 9, line 30 of Toutonghi],

- wherein the intermediary software component [constructs the enterprise bean proxy object using the key object saved in the CopyHelper; col. 10, lines 26 – 40 of Chan] is configured to start the target software component having the indicated identifier within the isolated execution unit created by the external program [COM APIs that create instances using a class identifier (CLSID); col. 4, line 62 - col. 5, line 10 of Toutonghi] and establish a communication path between the intermediary software component [bean proxy object; col. 10, lines 26 – 40 of Chan] and the external program [Access Bean 310, Fig. 3; col. 6, line 42 - col. 7, line 16 of Chan] whereby the external program can control or monitor the target software component via the established communication path [access the software component on the first server through a computer network; col. 3, line 65 – col. 4, line 18 of Chan]. As to the motivation for combining Chan with Toutonghi, see the rejection to claim 1 above.

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10. As to claims 2 and 3, Chan as modified teaches the established communication path [access the software component on the first server through a computer network; col. 3, line 65 – col. 4, line 18 of Chan] uses an inter isolation communication protocol that is a remote method invocation technique [remote method call; col. 8, line 48 – col. 9, line 7 of Chan].

11. As to claim 4, Chan as modified teaches the communication path is established by the intermediary software component [bean proxy object; col. 10, lines 26 – 40 of Chan].

12. As to claim 5, Chan as modified teaches prior to establishing the communication path, initializing the isolated execution unit into a desired state [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan] supplied by the external program [col. 3, line 63 – col. 4, line 12 of Toutonghi].

13. As to claim 6, Chan as modified teaches the isolated execution unit is initialized into the desired state [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan], supplied by the external program by the intermediary software component [col. 3, line 63 – col. 4, line 12 of Toutonghi].

14. As to claim 7, Chan as modified teaches indicating one or more parameters [col. 10, lines 55 – col. 11, line 12 of Chan] for initializing the isolated execution unit [instantiating an enterprise bean 138; col. 7, lines 15 – 33 of Chan], wherein the initialization of the isolated execution unit is based on the indicated one or more parameters [col. 10, lines 55 – col. 11, line 12 of Chan].

15. As to claim 8, Chan as modified teaches the external program indicates the one or more parameters [col. 10, lines 55 – col. 11, line 12 of Chan].

16. As to claim 9, Chan as modified teaches indicating an execution control parameter to the intermediary software component [col. 10, lines 55 – col. 11, line 12 of Chan]; and invoking the indicated execution control parameter on the target software

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component using an application programming interface (API) of the target software component [APIs for a component that is implemented as a Java bean; col. 8, line 63 - col. 9, line 30 of Toutonghi].

17. As to claim 12, Chan as modified teaches receiving a result at the intermediary software component from the target component in response to the invoked execution control parameter; and sending the result to the external program [col. 9, lines 13 – 33 of Chan].

18. As to claim 13, Chan as modified teaches the intermediary software component sends the result [col. 9, lines 13 – 33 of Chan].

19. As to claim 15, Chan as modified teaches the identifier of the target software component is provided by the external program [create component instances using a class identifier (CLSID); col. 8, line 63 - col. 9, line 30 of Toutonghi].

20. As to claims 17 – 24, 27, 28 and 30, these are product claims that correspond to method claims 2 – 9, 12, 13 and 15; note the rejections to claims 2 – 9, 12, 13 and 15 above, which also meet these product claims.

21. As to claims 32 – 36 and 38, these are system claims that correspond to method claims 2 – 3, 6, 7, 9 and 12; note the rejections to claims 2 – 3, 6, 7, 9 and 12 above, which also meet these system claims.

22. Claims 10, 11, 14, 25, 26, 29, 37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chan and Toutonghi further in view of U.S. Patent No. 6,609,158 to Nevarez et al. [hereinafter Nevarez, cited in previous office action].

23. As to claim 10, Chan as modified teaches execution control parameter [col. 10, lines 55 – col. 11, line 12 of Chan] and the RMI inter isolation communication protocol [remote method call; col. 8, line 48 – col. 9, line 7 of Chan], but does not specify translating a request from a first format to a second format.

However, Nevarez teaches a translator [a universal language adapter 226; col. 10, lines 5 – 20] for translating a request in a first format to a second format that is acceptable by the API of the target software component [core 228 is thus a mapping layer or engine which converts script commands from the universal language adapter 226 into calls to the object model adapter 230; col. 10, lines 5 - 20].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to further modify the invention of Chan and Toutonghi to incorporate the features of a translator for translating a request in a first format to a second format that is acceptable by the API of the target software component as taught by Nevarez because this makes it easier for programs written according to different languages and/or different object models to communicate with each other and allows connection of disparate software components [col. 4, lines 9 - 11 and 29 - 30 of Nevarez].

24. As to claim 11, Chan as modified teaches the intermediary software component performs the translation [col. 10, lines 5 – 20 of Nevarez].

25. As to claims 14 and 39, Chan as modified teaches the result has a first format that is acceptable by the API of the target software component [remote provider 230 accepts calls from the object model adapter 246, uses standard network technology such as the remote bridge 248 to contact remote objects, and relays parameters and results; col. 10, lines 45 – 50 of Nevarez], the method further comprising translating the first format into a second format that is an inter isolation communication protocol before sending the result to the external program [col. 10, lines 5 – 20 of Nevarez].

26. As to claims 25, 26 and 29, these are product claims that correspond to method claims 10, 11 and 14; note the rejections to claims 10, 11 and 14 above, which also meet these product claims.

27. As to claim 37, this is a system claim that corresponds to method claim 10; note the rejection to claim 10 above, which also meet this system claim.

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Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,944,680 discloses a SmartHandle that can extend capabilities of a EJB handle.

U.S. Patent No. 6,510,550 discloses a method for providing an application with intermittent connectivity support.

CONTACT INFORMATION

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (571) 272-3768. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen
Examiner
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lbz


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